

In re Application of: Hanan HERZBERG
Serial No.: 10/511,859
Filed: October 18, 2004
Office Action Mailing Date: July 21, 2008

Examiner: Leon FLORES
Group Art Unit: 2611
Attorney Docket: 37476

REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 4-13, 15, 16, 18, 20-27, 29, 33, 34, and 37-55 are rejected. Claims 1-3, 14, 17, 19, 28, 30-32, 35 and 36 were previously canceled. Claims 10, 45, and 52 are cancelled herewith without prejudice. Claims 4-8, 11-13, 15, 20, 24-27, 33, 39-44, 54 and 55 are amended herewith.

The Application now comprises, after amendments, claims 4-9, 11-13, 15, 16, 18, 20-27, 29, 33, 34, 37-44, 46-51, and 53-55, of which claims 16, 18 and 53 are in independent form.

The Examiner has indicated in the Office Action mailed January 17, 2008, that claims 10, 16, 18, and 45 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant, in response to the Office Action of January 17, 2008, rewrote claims 10, 16, 18 and 45 in independent form including all of the limitations of the base claim and any intervening claims.

However, after conducting another search, the Examiner has issued new grounds of rejection.

Independent claims 10, 45 and 52, have been cancelled without prejudice. Claims dependent from the cancelled claims have been amended to depend from the other independent claims (claims 16, 18 and 53).

The Examiner has rejected independent claim 16 under 35 U.S.C. §103(a) as being unpatentable over Van Den Brink et al. (US Publication Application No. 2003/0174765) in view of Schneider et al. (US Publication Application No. 2004/0095167) and further in view of Nakamoto et al. (US Patent No. 7,100,091)

The Examiner states that Van Den Brink discloses a method of analyzing the performance of a modem connection, comprising: connecting a line interface to a communication link carrying signals of a modem connection, between a pair of end

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modems (See fig 1 & ¶s 87-97); collecting data and other signals passing on the communication link, between the end modems, through the line interface. (See fig 1 & ¶s 87-97)

But the reference of Van Den Brink fails to explicitly teach injecting through the line interface noise which forces a retrain of the modem connection. However, Downey does. (See fig. 3 & col. 5, lines 1-23) Downey discloses a system for training/re-training the connection of two modems.

Applicant respectfully disagrees with Examiner's rejection of the above limitation as obvious over Downey. Applicant points out that Downey's system controls the modems, therefore (see fig 1 of Downey) either control processor 26 issues a command to the modem 14 to retrain, or issues a command to DSLAM 10 to bring the modem 14 offline then online, thereby forcing the modem 14 to retrain. This is *different and does not suggest* the present invention, which injects noise to cause a retrain. In order to do that Downey would have to teach injecting noise to cause a retrain, which Downey *does not teach nor suggest*.

Applicant therefore deems that there is no *prima facie* evidence of claim 16 being obvious over a combination of Van Den Brink, Downey, Schneider, and Nakamoto. In view of the above Applicant deems amended claim 16 to be allowable.

The Examiner further states that the combination of Van Den Brink and Downey discloses the limitations as claimed above, except they fail to teach that wherein injecting the noise comprises connecting a low impedance circuit, for at least some of the frequency bands carrying signals, to the communication link. However, Schneider does (See ¶s 74-75).

Applicant respectfully disagrees with Examiner's rejection of the above limitation as obvious over Schneider. Applicant points out that Schneider *teaches against* connecting a low impedance circuit. The following is a quote of Schneider's paragraph 75, cited by the Examiner:

"[0075] In order not to disturb signals generated by the xDSL modem office ends 1210a, 1210b, the Thvenin impedance of the noise

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waveform generators 1220a, 1220b should be high in comparison to the impedance of the telephone loop simulator 1215 and xDSL modem office ends 1210a, 1210b. If not, the low-impedance output of the noise waveform generators 1220a, 1220b may overdrive the communications channel, thereby disturbing the signals generated by the xDSL modem office ends 1210a, 1210b. Thus, the analog outputs of the noise waveform generators 1220a, 1220b, which may be low-impedance outputs, should be converted into high-impedance balanced current source outputs.”

Schneider teaches that when connecting the noise waveform generators 1220a, 1220b in order to inject noise, a high-impedance connection should be made in order to inject the noise waveforms, *rather than* a low-impedance circuit claimed in claim 16.

Applicant therefore deems that there is no *prima facie* evidence of claim 16 being obvious over a combination of Van Den Brink, Downey, Schneider, and Nakamoto.

In view of the above Applicant deems independent claim 16 to be allowable.

The Examiner has rejected claims 18 and 46-51 under 35 U.S.C. §103(a) as being unpatentable over Van Den Brink et al. (US Publication Application No. 2003/0174765) in view of Javitt et al. (US Patent No. 6,002,677) and further in view of Nakamoto et al. (US Patent No. 7,100,091)

Regarding claim 18, the Examiner states that Van Den Brink discloses a method of analyzing the performance of a modem connection, comprising: connecting a line interface to a communication link carrying signals of a modem connection, between a pair of end modems (See fig 1 & ¶s 87-97); collecting data and other signals passing on the communication link, between the end modems, through the line interface. (See fig 1 & ¶s 87-97)

But the reference of Van Den Brink fails to explicitly teach injecting through the line interface noise which forces a retrain of the modem connection. However, Downey does. (See fig. 3 & col. 5, lines 1-23) Downey discloses a system for training/re-training the connection of two modems.

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Applicant respectfully disagrees with Examiner's rejection of the above limitation as obvious over Downey, *arguing as above with reference to claim 16*.

Applicant therefore deems that there is no *prima facie* evidence of claim 18 being obvious over a combination of Van Den Brink, Downey, Javitt, and Nakamoto.

In view of the above Applicant deems independent claim 18 to be allowable.

Claims 9, 21-23, 34, 37-38 and 46-48, depend directly or indirectly from claim 18, and are therefore deemed allowable at least by virtue of their parent.

Claims 4-8, 11-13, 15, 20, 24-27, 33, 39-44, and 54-55, have been amended to depend directly or indirectly from claim 18, and are therefore deemed allowable at least by virtue of their parent.

Claims 49-51 depend from claim 53, and are discussed again below, with reference to the rejection of claim 53.

The Examiner has rejected claims (1, 4-9, 12, 27, 39, 53) under 35 U.S.C. §103(a) as being unpatentable over Van Den Brink et al. (US Publication Application No. 2003/0174765) in view of Javitt et al. (US Patent No. 6,002,677) and further in view of Nakamoto et al. (US Patent No. 7,100,091)

Applicant respectfully points out that claim 1 was cancelled in a previous response to an Office Action. Based on the other claims rejected Applicant guesses that the rejection is aimed at method claim 52, and answers to claim 52.

As stated above, claim 52 has been cancelled without prejudice.

Other claims rejected in the above rejection, except claim 53, have been amended to depend from other claims, and are discussed with reference to their parent claims.

Claim 53 is an apparatus claim corresponding to claim 18, which is deemed allowable based on arguments presented in the present Response. In view of the above Applicant deems amended claim 53 to be allowable.

Claims 29 and 49-51 depend directly or indirectly from claim 53, and are therefore deemed allowable at least by virtue of their parent.

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In view of the above amendments and remarks it is respectfully submitted that claims 4-9, 11-13, 15, 16, 18, 20-27, 29, 33, 34, 37-44, 46-51 and 53-55, are now in condition for allowance. A prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,



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Date: January 21, 2009

Enclosure:

- Petition for Extension (Three Months)